SRT411assignment0

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3.1 ToDo

```
(2017-2014)/(2014-1985)*100
```

```
## [1] 10.34483
```

3.2 TODO

```
Cur_Year = 2017
My_Birth = 1985
(Cur_Year - 2014)/(2014 - My_Birth)*100
```

```
## [1] 10.34483
```

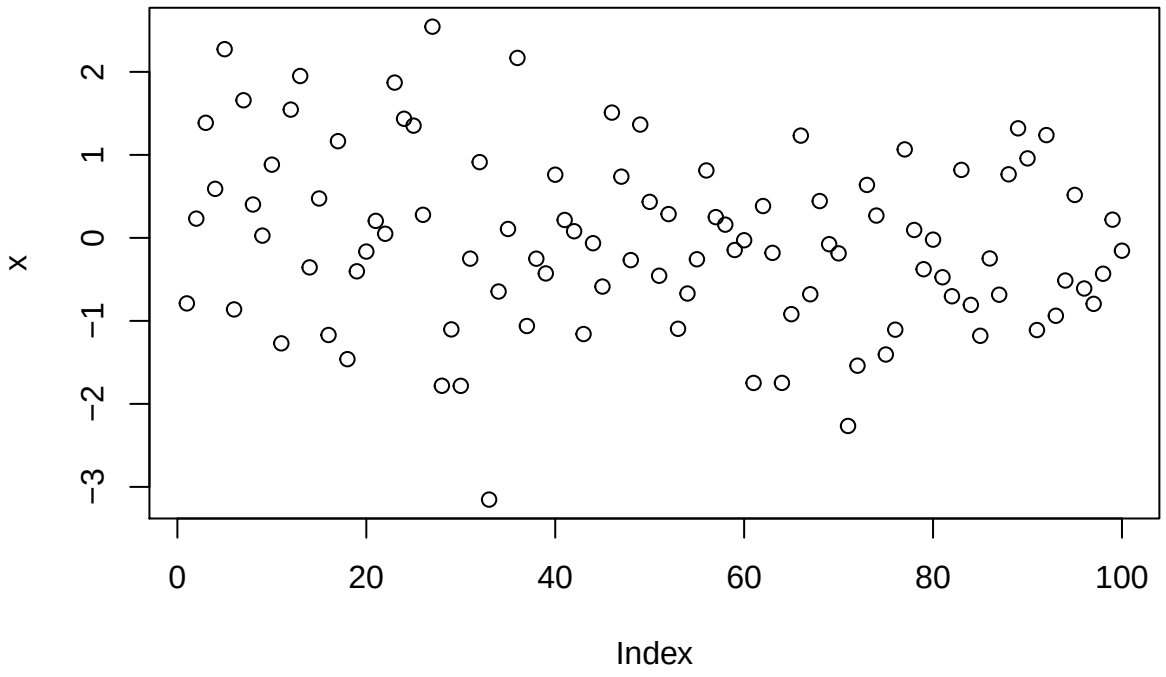
3.4 TODO

```
a=c(4,5,8,11)
sum(x=a)
```

```
## [1] 28
```

3.5 TODO

```
x = rnorm(100)
plot(x)
```



#4.0

TODO

```
help(sqrt)
```

6.0 TODO

```
P = seq(31,60)
Q = matrix(data=P, ncol=5,nrow=6)
P
```

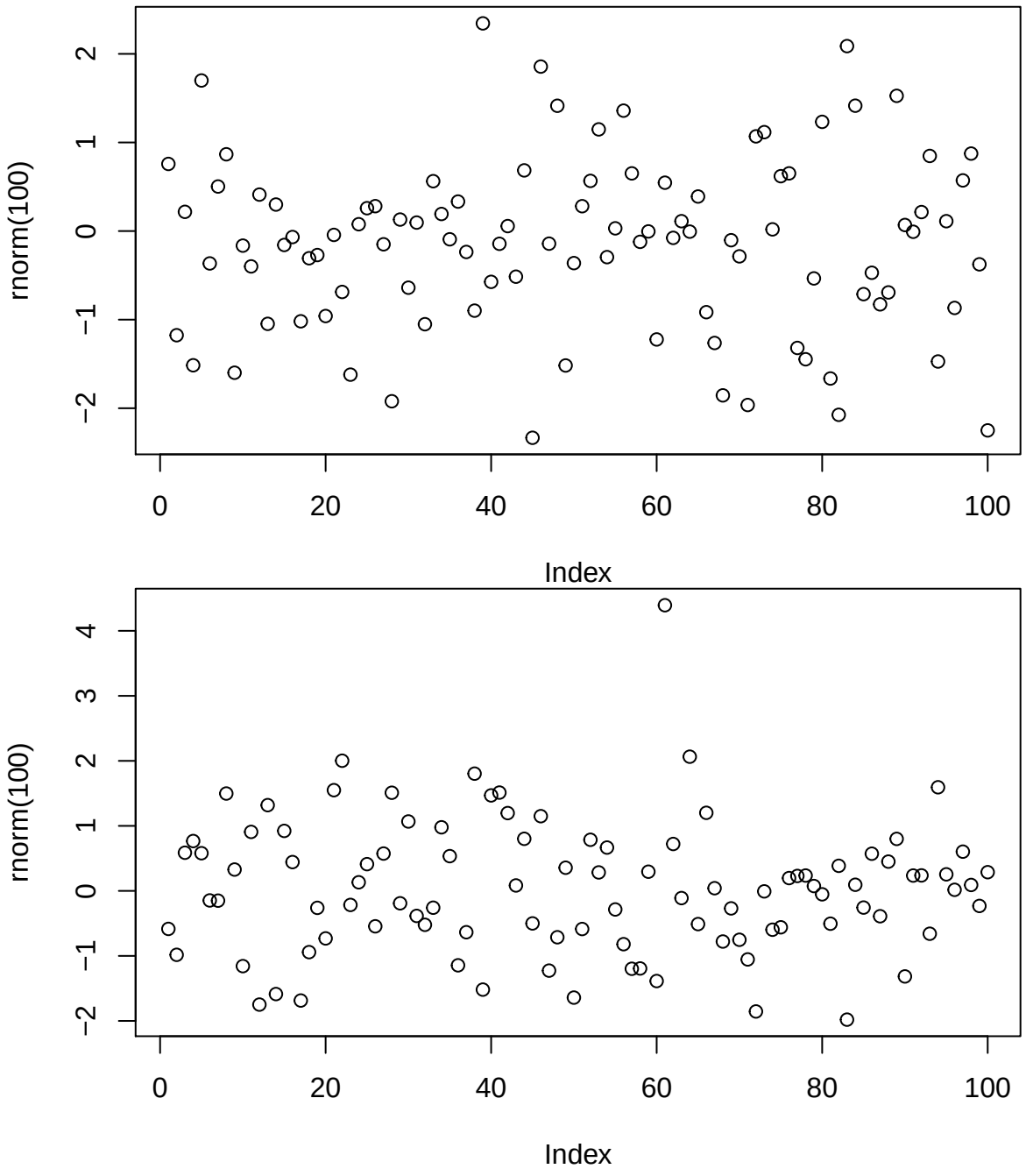
```
##  [1] 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52 53
## [24] 54 55 56 57 58 59 60
```

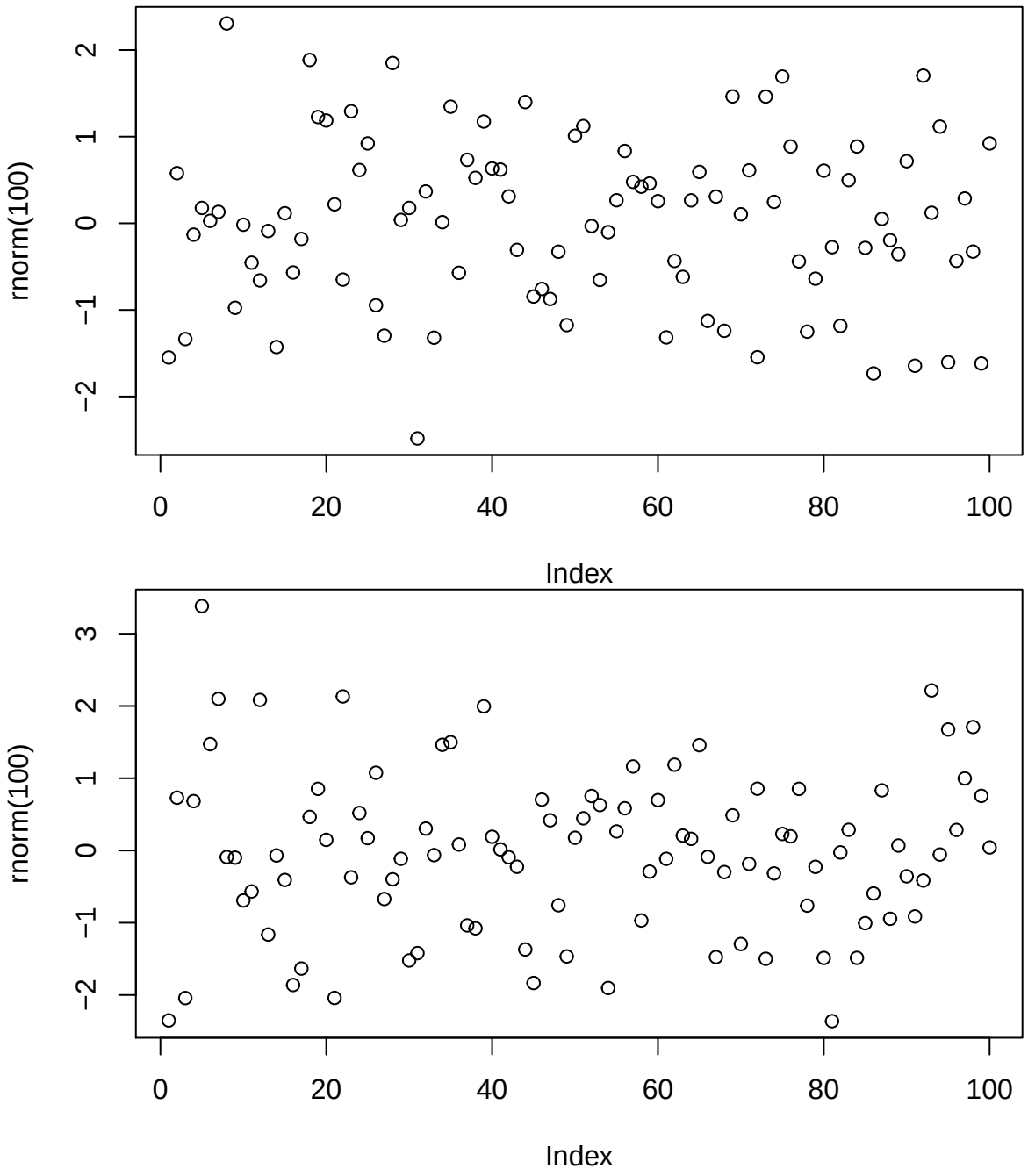
```
Q
```

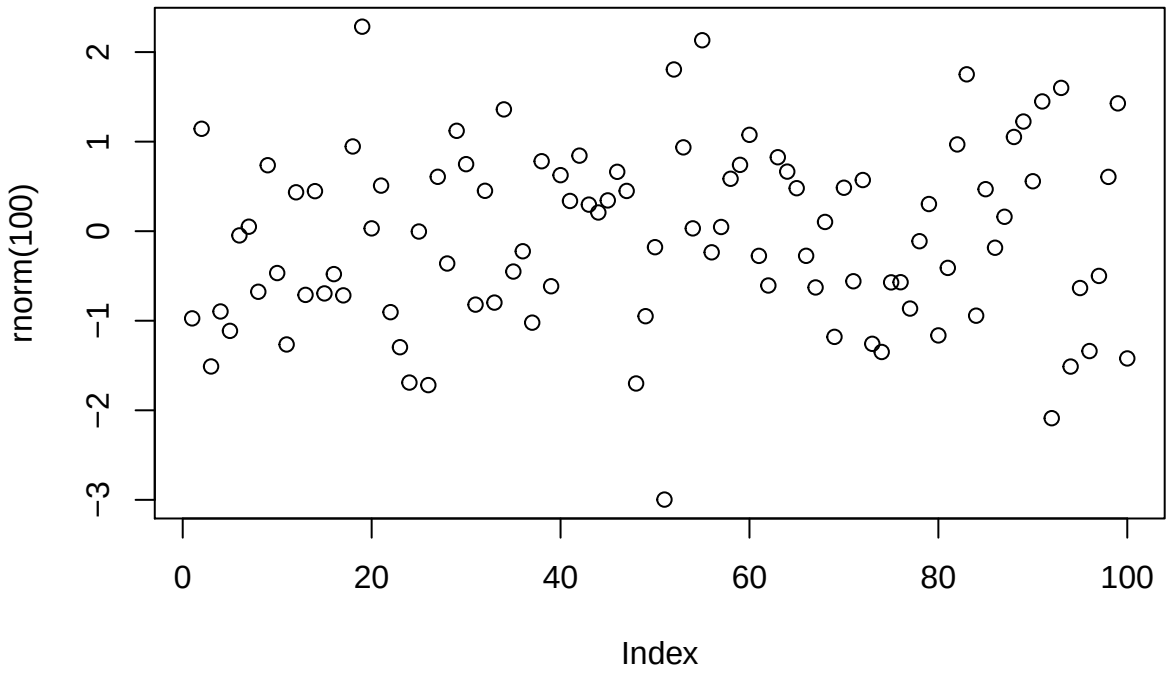
```
##      [,1] [,2] [,3] [,4] [,5]
## [1,]   31   37   43   49   55
## [2,]   32   38   44   50   56
## [3,]   33   39   45   51   57
## [4,]   34   40   46   52   58
## [5,]   35   41   47   53   59
## [6,]   36   42   48   54   60
```

5.0 TODO

```
earrings = 1
while (earrings < 6) {
  plot(rnorm(100))
  earrings = earrings+1
}
```

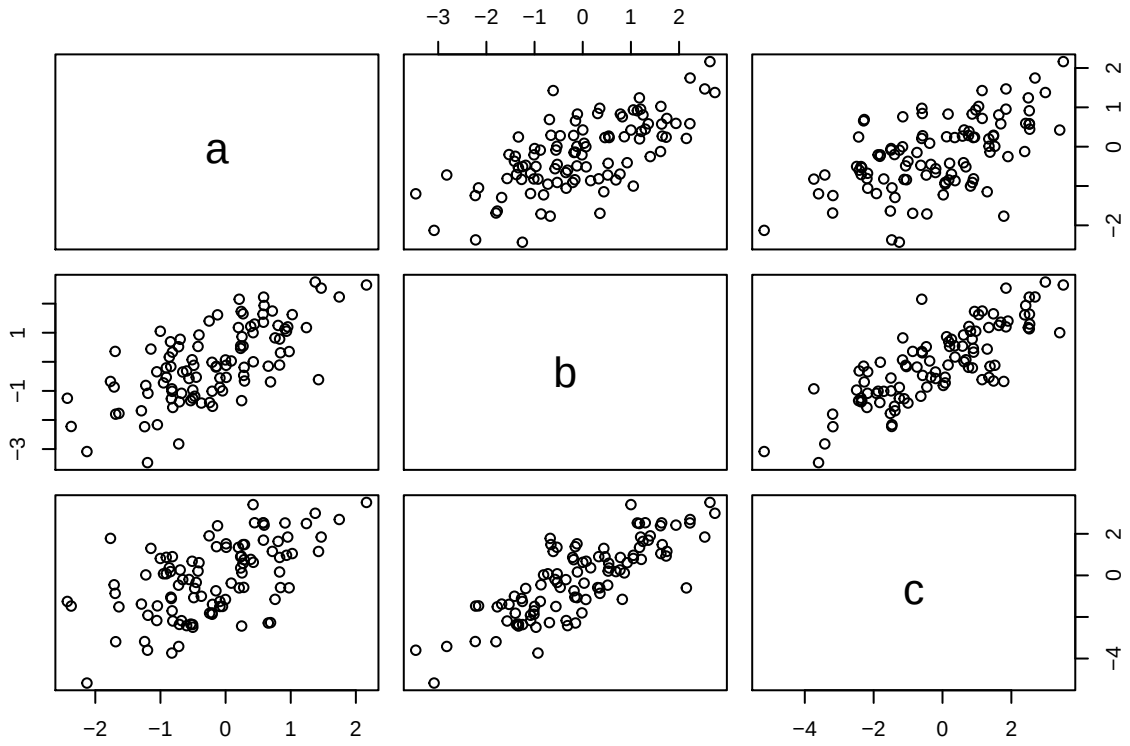

rnorm(100)
2
1
0
−1
−2
0
20
40
60
80
100
Index
rnorm(100)
4
3
2
1
0
−1
−2
0
20
40
60
80
100
Index


rnorm(100)
2
1
0
−1
−2
0
20
40
60
80
100
Index
rnorm(100)
3
2
1
0
−1
−2
0
20
40
60
80
100
Index



6.3 TODO

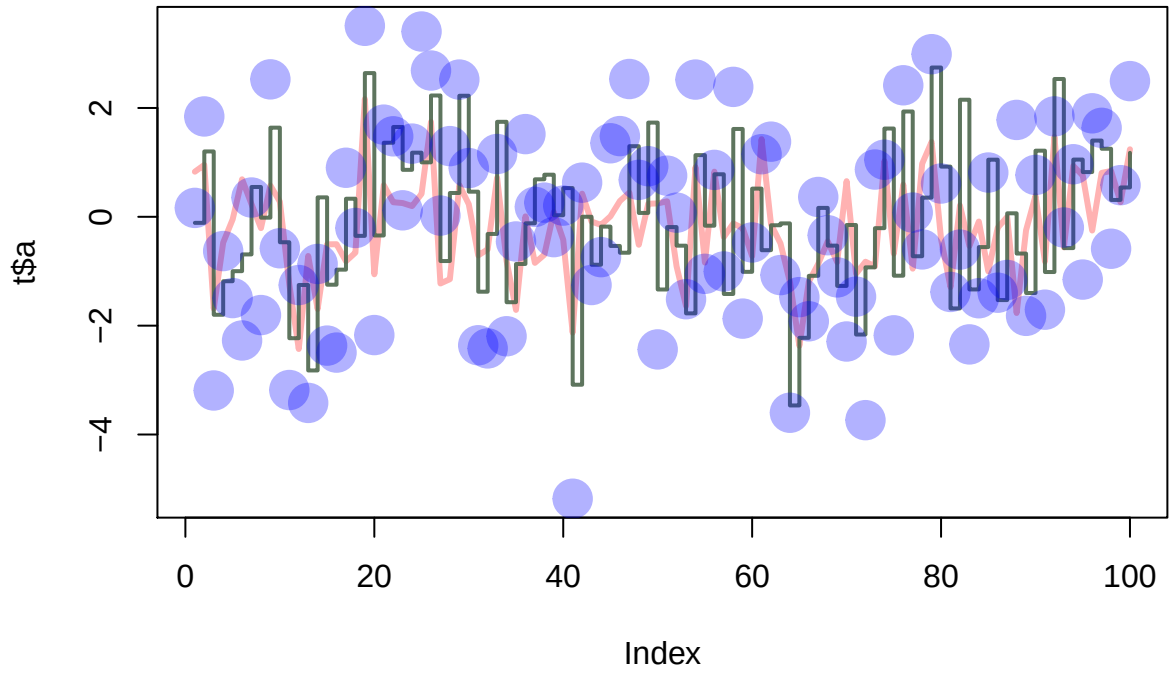
```
x1 =c(rnorm(100))
x2 = c(rnorm(100))
x3 = c(rnorm(100))
t = data.frame(a=x1,b=x1+x2,c=x1+x2+x3 )
plot(t)
```



#7.0

TODO

```
plot(t$a, type="l", ylim=range(t),lwd=3, col=rgb(1,0,0,0.3))
lines(t$b, type="s", lwd=2,col=rgb(0.3,0.4,0.3,0.9))
points(t$c, pch=20, cex=4,col=rgb(0,0,1,0.3))
```



8.0 TODO

```
D8= read.table(file = "/home/juan/SRT411/SRT411-Assignment-0/tst1.txt", header =TRUE)
write.table(D8$g*5, file=  "/home/juan/SRT411/SRT411-Assignment-0/tst1.txt",row.names=FALSE)
D8
```

```
## [1] x
## <0 rows> (or 0-length row.names)
```

9.0 TODO

```
##V9=c(rnorm(100), na.rm=TRUE)
V9=c(runif(n=100, min=0, max=100))
V9
```

```
##   [1] 69.498382 42.555064 40.915711 53.200105  5.576846 19.052001 94.695603
##   [8] 29.382163 86.654144 90.885356 22.171139 64.873440 95.884549 17.584901
##  [15] 97.616088 80.312013 82.227956 20.221108 23.509695 78.688794 72.121814
##  [22] 35.790422 46.052878 63.282510 22.764041 26.420974 50.025745 29.647023
##  [29] 51.204345 20.088051 53.008795 40.341983 34.291871 65.824103 39.398901
##  [36] 37.138553 87.407441 70.465096 68.702661 86.084486 47.220642 26.467933
##  [43] 81.746501 89.383043 91.348314  5.332055 85.611175 49.888358 42.083699
##  [50] 53.052066 92.910777 79.226330 46.874697 59.147814 51.483514 77.709569
##  [57] 25.641302 17.122960 80.043665 99.398958 20.947593 15.201515 66.604330
##  [64] 63.442050 28.383695  9.386530 95.198211 78.151489 88.133346 57.755344
##  [71] 93.790431 52.164395 89.181892 84.574369 13.333167 27.129167 29.465206
##  [78] 83.127133 76.689703 70.721885 64.043672 49.250960 74.118320 82.644785
##  [85] 85.341962 86.953465 85.262194 10.982652 38.367637 41.329855  7.865418
##  [92] 75.179949 36.325054 63.701272 18.884769 40.801568 14.851324 68.726958
##  [99] 87.552956 16.472363
```

```
j=c(1,2,NA)
max(j)
```

```
## [1] NA
```

```
max(j,na.rm = TRUE)
```

```
## [1] 2
```

```
max(V9, na.rm=TRUE)
```

```
## [1] 99.39896
```

```
mean(sqrt(V9), na.rm = TRUE)
```

```
## [1] 7.13291
```

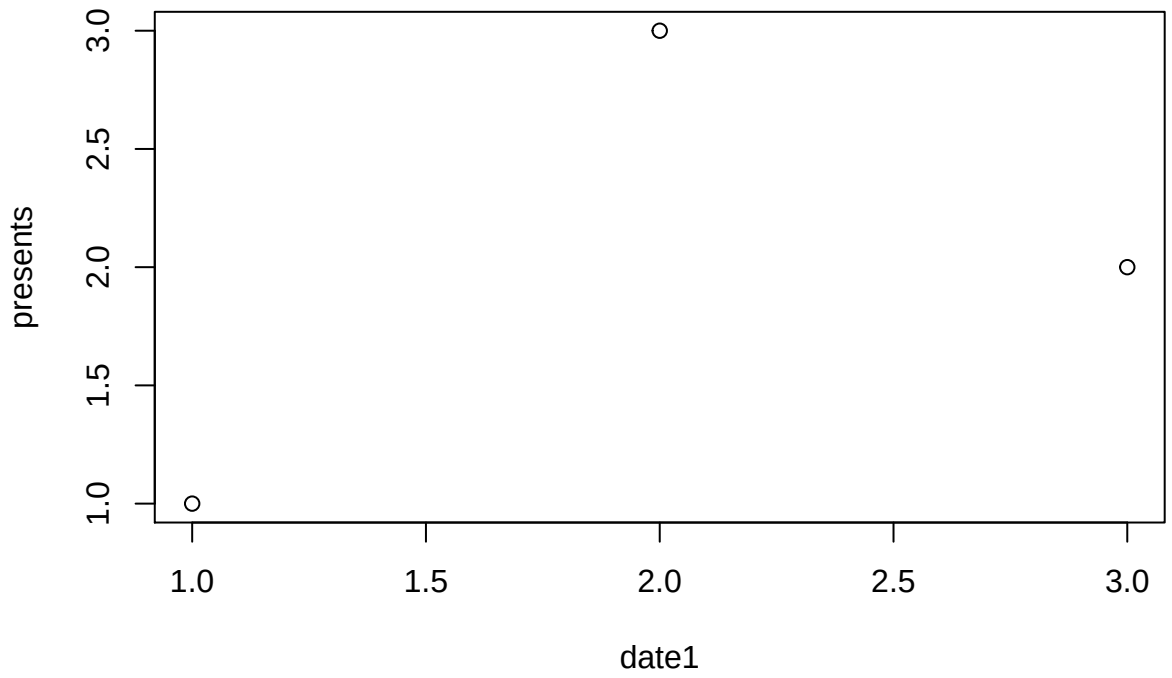
10.2 Dates

```
date1=strptime(c("20170201","20171225","20170216"),format = "%Y%m%d")

d<- data.frame(date1=c("20170201","20171225","20170216"),presents=c("2","3","4"))
```

```
##d<- data.frame(date1,presents=c("2","3","4"))
x<-d$date1
y<-d$prensents

plot(x,y,xlab="date1",ylab="presents")
```



#11.2

TODO

```
s=c()
for(i in 1:100)
 {if (i<5 | i >90)
   {s[i]=i * 10
   }else{
   s[i]=i*0.1
   }
}
s
```

```
##   [1]   10.0   20.0   30.0   40.0    0.5    0.6    0.7    0.8    0.9    1.0
##  [11]    1.1    1.2    1.3    1.4    1.5    1.6    1.7    1.8    1.9    2.0
##  [21]    2.1    2.2    2.3    2.4    2.5    2.6    2.7    2.8    2.9    3.0
##  [31]    3.1    3.2    3.3    3.4    3.5    3.6    3.7    3.8    3.9    4.0
##  [41]    4.1    4.2    4.3    4.4    4.5    4.6    4.7    4.8    4.9    5.0
##  [51]    5.1    5.2    5.3    5.4    5.5    5.6    5.7    5.8    5.9    6.0
##  [61]    6.1    6.2    6.3    6.4    6.5    6.6    6.7    6.8    6.9    7.0
##  [71]    7.1    7.2    7.3    7.4    7.5    7.6    7.7    7.8    7.9    8.0
##  [81]    8.1    8.2    8.3    8.4    8.5    8.6    8.7    8.8    8.9    9.0
##  [91]  910.0  920.0  930.0  940.0  950.0  960.0  970.0  980.0  990.0 1000.0
```

11.3 TODO

```
fun1=function(arg1,arg2)
{
s=c()
for(i in arg1:arg2)
 {if (i<5 | i >90)
   {s[i]=i * 10
   }else{
   s[i]=i*0.1
   }
}
s
}
fun1(arg1=3,arg2=50)
```

```
##  [1]   NA   NA 30.0 40.0  0.5  0.6  0.7  0.8  0.9  1.0  1.1  1.2  1.3  1.4
## [15]  1.5  1.6  1.7  1.8  1.9  2.0  2.1  2.2  2.3  2.4  2.5  2.6  2.7  2.8
## [29]  2.9  3.0  3.1  3.2  3.3  3.4  3.5  3.6  3.7  3.8  3.9  4.0  4.1  4.2
## [43]  4.3  4.4  4.5  4.6  4.7  4.8  4.9  5.0
```